

Falcon Refinery Site

Update 2/20/14

Site Location

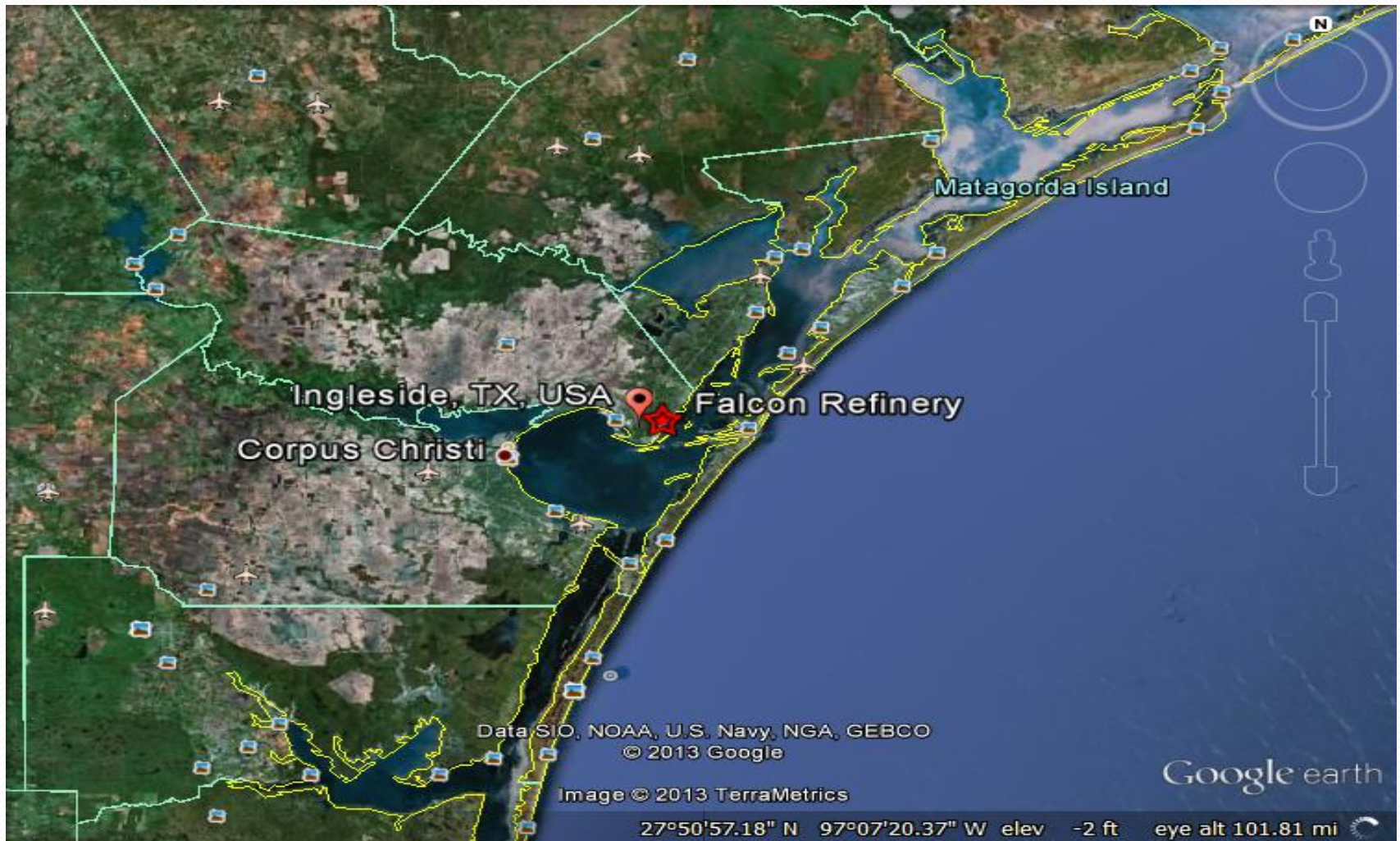




Figure 1a
Regional Location Map
Falcon Refinery aka National Oil Recovery Corporation
Ingleside, San Patricio County, Texas
TXD 086 278 058



*Protecting Texas by
 Reducing and
 Preventing Pollution*

2 0 2 4 Miles



Inset Map



San Patricio County

Source

The base data used is the Corpus Christi 1:100,000 scale Digital Raster Graphic (DRG), which is a scanned image of an U.S. Geological Survey topographic map. UTM NAD 27 Zone 14

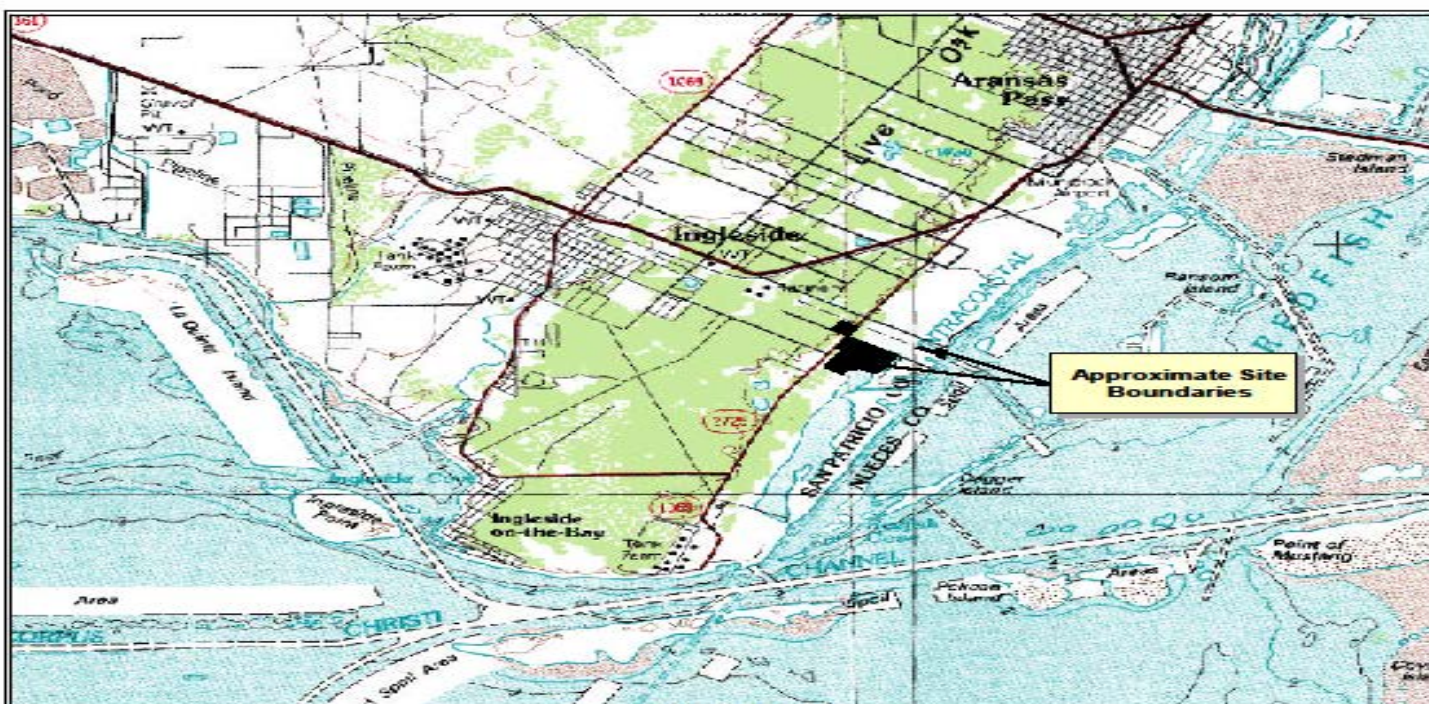
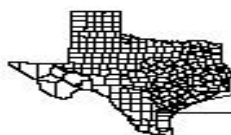


Figure 1b
Site Location Map
Falcon Refinery aka National Oil Recovery Corporation
Ingleside, San Patricio County, Texas
TXD 086 278 058



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Inset Map



San Patricio County

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The base data used is the Corpus Christi 1:100,000 scale Digital Raster Graphic (DRG), which is a scanned image of an U.S. Geological Survey topographic map. UTM NAD 27 Zone 14

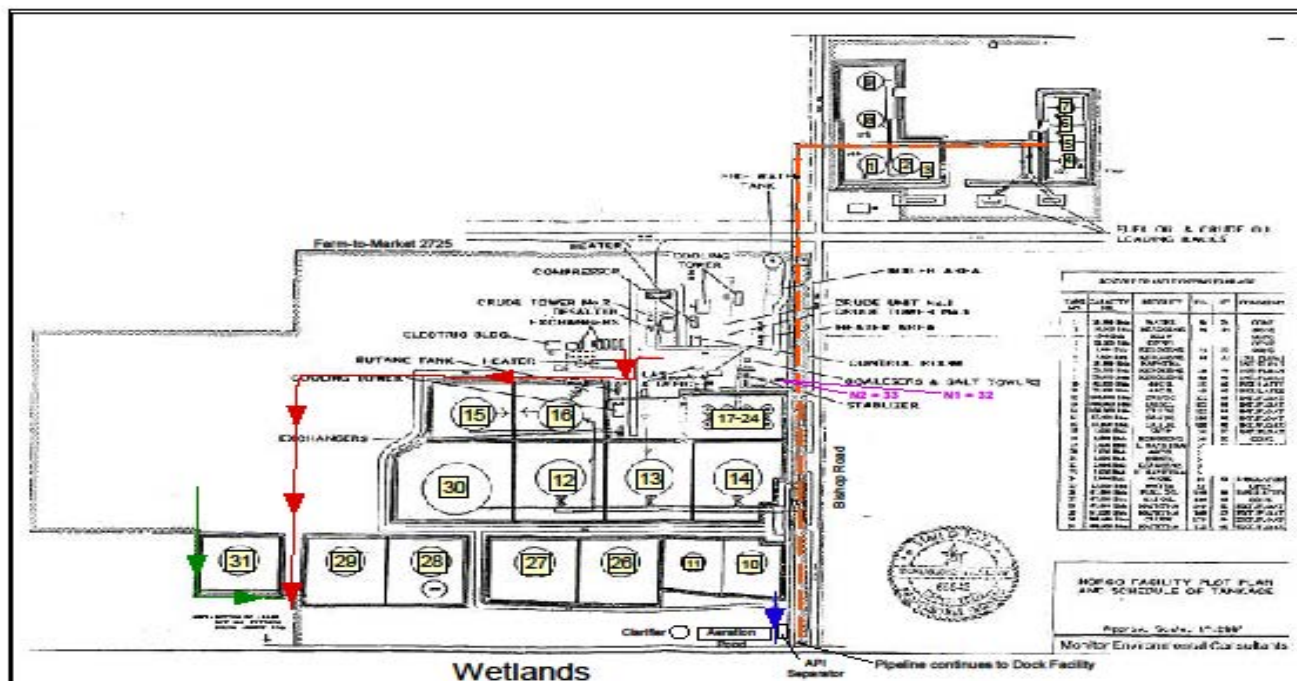


Figure 1c
Site Detail Map

Falcon Refinery aka National Oil Recovery Corporation
Ingleside, San Patricio County, Texas
TXD 086 278 058



Legend

- Drainage Pathway No. 1
- Drainage Pathway No. 2
- Possible Drainage Pathway
- Pipeline

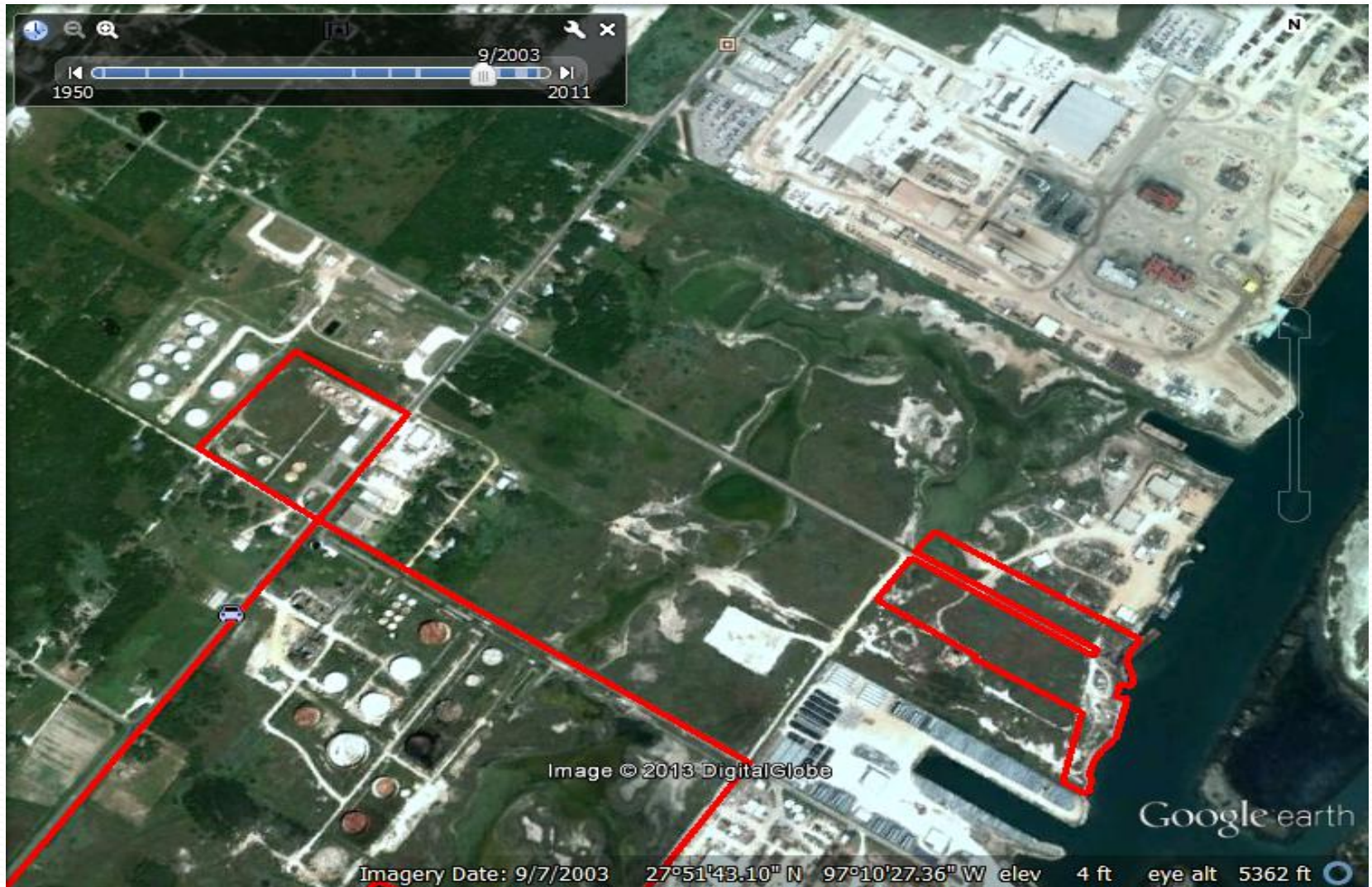


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Reference

Ref. 17, pp. 33-35

09.2003 Aerial



Site History

- 4/1980: The refinery was constructed by UNI Refining
 - The refinery or portions thereof operated intermittently under various entities for refining and storage and then just storage.
- 12/1990: National Oil Recovery Corporation (NORCO) obtained the facility
 - 6/1991: NORCO obtained the dock facility from Sun Operating.
 - It does not appear that NORCO ever operated the facility but did lease the facility out for use of the onsite storage tanks.
- 09/2011: Designation as Superfund Alternatives Site cancelled and Site was listed on the NPL
- 2/2012: Lazarus Texas Refinery 1 (LTR₁) obtained the facility and dock. NORCO remains liable for cleanup activities under the AOC even though they have a sales contract where LTR₁ has formally accepted those continuing AOC responsibilities.

Site History

Removal

- 08/2003: Action Memo for Oversight Costs Signed to be included in AOC (\$99,993).
- 06/2004: Removal AOC entered into with PRP (National Oil Recovery Corporation (NORCO)) to conduct Removal Action. The Scope of Work is:
 - Remove/Dispose of source materials from tanks, misc. containers, equipment, buildings, piping, and piping to the docks
 - The work also includes:
 - Asbestos Inspection and Abatement
 - Assessment and Removal of Hazardous Substance, or Pollutants, or Contaminants
 - Decontamination of Containers, Equipment, Piping, and Buildings
 - Removal of Containers, Equipment, Piping, and Other Contaminated Items
 - Consolidation, Removal, and Disposal of Visibly Contaminated Soils

Site History

Removal

- 02/10/2010: Superior Crude (Leasee) had a large oil spill estimated at 24,000 bbls with 2200 bbls entering wetland (Cleanup Performed by Superior)
- 03/28/2011: Work Takeover Letter issued to NORCO for default on Removal Order
- 04/2011 EPA obtains \$500K for Removal through Letter of Credit from NORCO due to default on Removal Order
- 05/2/2011: Agreed Order negotiated allowing NORCO to resume Removal Action

11.22.2011 Aerial



Site History

Removal

- During NORCO Ownership under the AOC (8/2003 – 2/2012), NORCO accomplished the following:
 - Disposal of:
 - 7.8 M gallons of hazardous waste liquids via deep well injection
 - 40 yd of petroleum contaminated soils
 - 15 yd hazardous solids
 - 58 T pounds of K169/Caustic Sludge
 - 166 T pounds K169 Sludge
 - 50 yd fiberglass insulation
 - Recycled 1.8 M pounds metal
 - Recycled 17 T gallons of oil
 - Cleaned/Gas Freed/Demolished 15 Tanks

Site History

Removal

- 02/23/12: Sale of Falcon Refinery - Letter Agreement between NORCO and LEH/LTR (closed about 2/29/12)
- 06/28/2012: Superior Crude (Leasee) had a pipeline spill estimated at 15 – 20 bbls (Cleanup Performed by Superior).
- 12/26/2012: Superior Crude (Leasee) had another tank spill (Tank 13) estimated at 3 – 5 gallons/minute and remained in a trench in secondary containment. Tank pumped off to barge. TRRC involved. (Cleaned up by Superior)
- 12/31/12: LTR₁ activities on-site ceased due to funding issues

Site History

Removal

- LTR1 actions since 2/12 – 12/12 purchase:
 - Conducted Site Maintenance Activities
 - Repaired Secondary Containment
 - Cleaned and Made Temp. Repair to T12 to facilitate transfer of water from T26
 - Set up transfer piping to transfer water from T26 to T12
 - Irrigation Field Set Up for Land Application of Treated water from T12/26
 - Removed portion of T30 internal roof to access sludge
 - Disposed of 50 yd of fiberglass insulation from previous tank demo
 - Inventoried/Sample Waste for Disposal and Treatment Option.
- 1/13: LTR1 progress stops due to funding issues
- 3/13: LTR1 provides information about a loan it is seeking to continue progress at site
- 4/13: LTR1 indicates the loan value is initially \$3.5 million but no further work can be done until loan is approved.

Items Remaining to be Completed

Removal

- Remaining Removal Activities:
- Tank 26
 - Transfer oily water from T26 to T12 or T16 or
 - Remove/Dispose of oily water/sludge (26,000 bbl/11375 bbl)
 - Demolish /RefurbishTank (as desired)
 - Remove all contaminated soils from below tank
- Tank 7
 - Remove/Dispose sludge from Tank (861 bbls)
 - Demolish /RefurbishTank (as desired)
 - Remove all contaminated soils from below tank
- Tank 30
 - Remove remainder of internal roof
 - Remove/Dispose of oily water/sludge (3032 bbl/3032 bbl)
 - Demolish /RefurbishTank (as desired)
 - Remove all contaminated soils from below tank
- Tank 12
 - Transfer oily water (6246 bbl) to T16 to be treated and irrigated
 - Demolish /RefurbishTank (as desired)
 - Remove all contaminated soils from below tank

Items to be completed

Removal

- Removal of materials from all piping and other equipment
- Butane Tank
 - Clean/Dispose of residual material
- Water Treatment System
 - Test installed irrigation system
 - Treat water with treatment chemical/sand/activated carbon
 - Test to determine if it meets TCEQ and Land Disposal Criteria and Retreat as necessary
 - Batch irrigate once water meets criteria
- Asbestos Removal
 - Conduct additional Asbestos Survey of Process Area
 - Conduct Asbestos Removal/Disposal as required
- Removal Action Report

Aerial Photo of Feb 2010 Spill



11.22.11 Aerial Showing Property



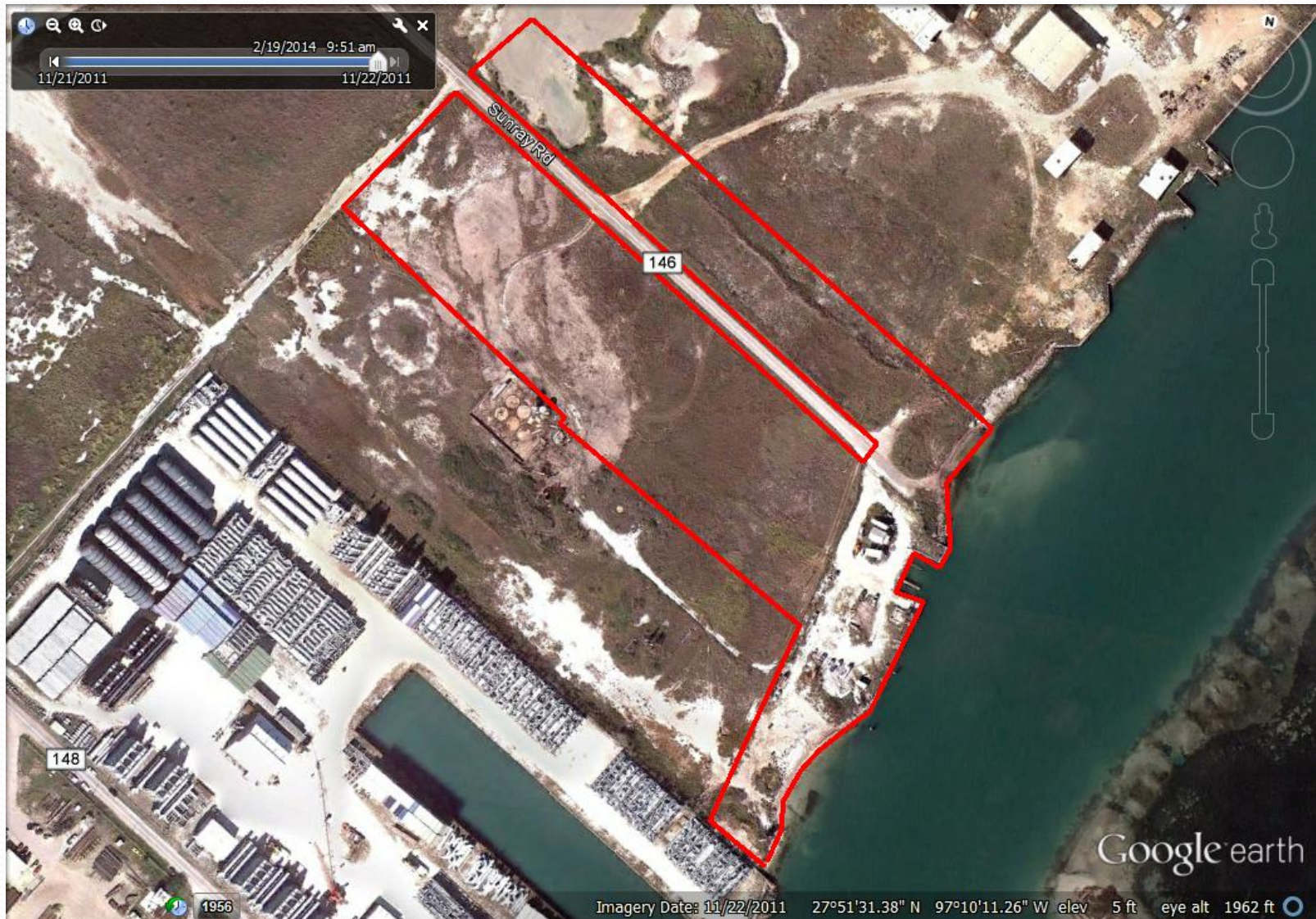
North Refinery Area 11.22.13



Main Refinery Area 11.22.13



Refinery Dock Area 11.22.13



Refinery Dock Closeup 11.22.13



Tankage

Tank Number	Tank Capacity (bbls)	Waste Type	Waste Volume (feet)	Waste Volume (bbls)
7	10000	Sludge (K169)	2.5	861
12	100000	Oily Water	3	6246
26	65000	Oily Water	16	26000
		Sludge (K169)	7	11375
30	160000	Oily Water	0.75	3082
		Sludge (K169)	0.75	3082

- Tanks 13, 14, 15 being still with Superior Crude
- Tank 16 is being repaired by LTR₁ (complete)

Estimated Costs

- Sludge: 643,356 gallons @6.02#/gal@ .0005 ton/# X \$500/ton = \$968,250
- Oily Water: 35328 bbls (1,483,776 gallons) X \$1.00 = \$ 1,483,000
- Asbestos Waste: \$3600
- Soil: \$ 50,000
- Transportation: \$350,000
- Labor: \$ 1,000,000
- Equipment & Supplies: \$ 1,000,000
- Total: \$ 5,821,500 (includes 20% contingency)

RI/FS

06/2004: Remedial AOC entered into with PRP to conduct RI/FS

08/2007: NORCO conducts RI Sampling (Phase I).

05/2009 EPA approves RI/FS Phase II WP, FSP, & QAPP

RI/FS

03/28/2011: Work Takeover Letter issued to NORCO for default on Remedial Order

04/2011: EPA obtains \$500K for Remedial through Letters of Credit from NORCO due to default on Remedial AOC

12/2011: EPA informs NORCO that EPA was taking over the RI/FS

RI/FS

03/2012: EPA sent letter to NORCO demanding payment of \$209,036.12 to comply with RI/FS order.

09/2012: EPA Cincinnati sends notice of non-compliance letter to NORCO for failure to pay past due amount of \$209,036.12.

09/2012: RI/FS Task Order issued to RACS Contractor (\$500K need \$1.2M).

RI/FS

02/2013: EPA approves Contractor's Site Management Plan, QAPP, and FSP for RI/FS.

08/2013: EPA Amends the FSP to conduct sampling in two phases

09/2013: Phase I sampling completed (Background sampling, monitor well installation, AOC 3, AOC 4, and AOC 5 sampling completed)



RI/FS

12/2013: EPA receives validated analytical data for Phase I sampling.

12/2013: LTRI requests EPA review risk assessment for AOC 4 prepared by LTRI's contractor

01/2014: EPA forwards LTRI's request to EPA's contractor to determine feasibility of using the information in EPA's Risk Assessment for the site.

RI/FS Schedule

Review data from Phase I sampling to determine data needs for Phase II Mar 2014

Phase II sampling (spring/summer 2014)

Risk Assessment for Site Sep 2014

RI Report Dec 2014

FS Report June 2015



Legend:

- Proposed Monitoring Well Location
- Proposed Soil Sample Location
- Area of Concern 1 Boundary

Source: AOC and pipeline locations from
TRC, dated, March 10, 2011

Image Source: 2009 Texas Orthoregistry Program,
Texas Strategic Mapping Program, TNRS, 2009



Falcon Refinery Superfund Site
Ingleside, San Patricio County, Texas

Figure 2
AOC-1 Sample Locations
Field Sampling Plan







Falcon Refinery Superfund Site
Inglewade, San Patricio County, Texas

Figure 5
AOC-4 Sample Locations
Field Sampling Plan





Legend:

- Proposed Soil Sample Location
- Proposed Temporary Well at Soil Sample Location
- Proposed Redox Potential Water Sample Location
- Area of Concern Boundary

Source: Aerial and digital data from the Texas A&M University, 2007.

Image Source: 2007 Texas A&M University, 2007.



Falcon Refinery Superfund Site
Ingleside, San Patricio County, Texas

Figure 9
Background Sample Locations
Field Sampling Plan

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